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The Perception of aggression towards the medical personnel of psychiatric wards in Poland and in Norway – a comparative analysis

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Summary

Background and objectives: Psychiatric hospitals are unique in character. In their work the personnel frequently encounter aggression on the part of patients and their families. A difficulty in describing the impact of aggression on the quality of care lies in the fact that countries differ in terms of their approach to treatment, education systems, as well as the standards and algorithms of dealing with aggression that occur within a health care facility.

The objective of the present study was to find out whether there are any differences in the attitudes and perception of patients' aggression prevalent amongst groups of personnel from Poland and Norway. This issue has yet to be discussed in the subject literature; however, it should be assumed that such differences exist, so the question pertains to their direction and intensity.

Methods: Two tools were used to identify the attitudes of the medical personnel towards aggression: POAS (Perception of Aggression Scale) and ATAS (Attitudes Towards Aggression Scale). The research comprised 280 people – the personnel of psychiatric wards from the psychiatric hospital in Bergen, Norway (n= 140) and from the psychiatric hospitals in Żurawica and Jarosław in Poland (n= 140).

Results: Statistically significant differences were demonstrated between the attitudes and perception of aggression by the medical personnel in Poland and in Norway (p> 0.001). The Norwegian personnel more frequently perceive aggression as positive behaviour, associated with the protection of one's own territory. On the other hand, the Polish staff more often regard aggression as negative, offensive and intrusive behaviour.

Conclusions: The perception of aggression towards the medical staff of psychiatric wards in Poland and Norway differs.

aggression, violence, medical personnel, perception of aggression

INTRODUCTION

Psychiatric hospitals are unique in their character. The media present them as a highly-controlled environment where the personnel have almost unlimited power over patients. The hospital itself creates a specific network of determi-

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nants resulting in it being described as a total institution [1]. In total institutions, the personnel have a privileged status because they formulate the rules for the functioning of these institutions. Obviously, a mental illness differs from a somatic disease, so the procedure and treatment must also be different. A characteristic feature of a psychiatric ward is the so-called "paternalism" manifested in authorized interference in a patient's personal space, for the sake of the patient [2]. On the other hand, both psychiatrists and staff employed in psychiatric wards are exposed to verbal and physical aggression on the part of patients.

The phenomenon of aggression poses a major problem in everyday work with patients. Studies reveal that medical personnel frequently face aggression [3]. Aggression towards medical staff is a serious problem, having negative consequences both for health care employees as equally the patients themselves [4]. Unfortunately, the studies demonstrate that medical team members often consider aggression to be a part of their work. This can depend on many factors, including the current level of threat connected with the number of aggressive incidents occurring in the ward [5]. The most frequent phenomenon encountered by personnel is verbal aggression consisting of insults, shouts and threats.

A difficulty in describing the impact of aggression on the quality of care lies in the fact that countries differ in terms of their approach to treatment, education systems, as well as the standards and algorithms for dealing with aggression occurring at a health care facility [6]. Nevertheless, there is also a thesis that the psychological reactions of personnel to patients' aggression are similar regardless of country, cultural circle or the conditions of care [7].

Aggression towards medical personnel is a more complex problem and in order to comprehend the scale of the phenomenon we cannot look for its causes in the patient only. Aggression in health care is a mutual interaction of many factors including, on the one hand, personality traits, emotions and the health condition of the patient and visitor [8, 9] but also, on the other hand, features of the personnel themselves, the medical profession practised (nurse, doctor, paramedic), age and clinical experience. Other significant factors are: perception of aggression and attitudes towards it [10], as well as the socio-cultural traditions connected with the approach to the treatment of mental illnesses, followed at a given health care facility [11].

Personnel attitudes can result from many different factors. As regards the understanding of personnel's behaviour towards patient aggression, the subject literature most often refers to Ajzen's concept [12]. According to this idea, an action is an effect of social and personal factors. Social factors are understood as perceived social pressure which leads to the doing or the abandoning of a certain act (subjective norms). These factors are determined by understanding other people's expectations and by the importance of a given behaviour. They are also influenced by the motivation to comply. Subjective norms have an impact on intention, which is regarded as a motivation necessary to become involved in certain behaviours. In Ajzen's *Theory of Planned Behaviour*, intention is the key notion [13]. Intention is based on attitudes related to a given behaviour, the norms upheld and perceived behavioural control [14]. Intention determines an individual's readiness to take up a given action and indicates the probability of a particular behaviour. It depends on attitudes and perceived behavioural control, that is the level of perceived influence on a given behaviour. Intention is strongly affected by attitudes which, in this sense, are the outcome of beliefs about behaviour and its potential effects [14]. Similarly to subjective norms, attitudes and perceived behavioural control depend on specific beliefs. According to the TPB concept, the more positive the attitudes and subjective norms and the larger the perceived behavioural control, the higher the probability that a given action will be done. This means that the stronger the intention, the more readily a given action shall be taken up [14].

One of the first studies with the TPB concept as the theoretical basis was Jensen's research [15]. The participants of this research were psychiatric nurses working on wards for adults, children and adolescents. The results demonstrated that the majority of the nurses were not trained in coping with aggression and did not use coercive means. On the basis of the analyses, three ways of perceiving aggression were identified. The first one was connected with viewing aggression as a harming reaction, the second one

as normal behaviour and the third one as behaviour aimed at meeting the particular needs of a patient. The authors pointed to the necessity of further research in other environments and emphasized the possibility to obtain other factor loadings. They stressed that the three ways of perceiving the aggression identified would influence personnel behaviour towards a patient.

In the Dutch research in which ATAS (Attitudes Towards Aggression Scale) was used, nurses most frequently viewed aggression as offensive and destructive behaviour. Differences in the approach to aggression, in comparison to the original research by Jansen, were explained by the authors on the grounds of the passage of time (1997) and the change in attitude to patients' aggression which had taken place in the interim [16]. Later studies also pointed to a correlation between nurses' experience, their places of work and the perception of aggression. Nurses working in children's wards tend to view aggression more as functional behaviour in comparison to nurses employed in geriatric wards and those with longer work experience. The authors advanced the conclusion that there was a correlation between a frequent incidence of physical aggression and its perception as a harmful phenomenon [17]. Similar conclusions were drawn on the basis of a study among psychiatric nurses in Nigeria who, when surveyed with ATAS, more frequently perceived aggression as offensive, destructive and intrusive. Such an approach to a patient's aggression can result in a lower quality of health care [18]. On the other hand, a study with ATAS on a group of psychiatric nurses in Portugal showed that the perception of aggression as being a positive phenomenon correlated with being male and with professional experience.

The Japanese studies gave different results. They revealed that a more positive attitude to aggression was determined by age, clinical experience, education and the function fulfilled in the ward. People with negative attitudes towards aggression tended to use more frequently chemical or physical means to reduce the level of a patient's aggression. The authors also put forward a thesis that the attitudes to aggression in a patient with dementia are influenced by education about the disease itself, that is the cognitive element of the attitude [19]. Similar conclusions were drawn by the researchers who surveyed personnel working with mentally handicapped patients. It was demonstrated that people who had negative attitudes towards aggression used physical coercive means more often. Nevertheless, a collective approach to aggression was regarded as much more important than an individual one, as it triggered a more frequent use of coercive means [20]. However, other studies point to the role of individual attitudes towards aggression and deny the influence of ward culture with a common collective attitude towards aggression [21].

The reasons for such a selection was the difference in the functioning of mental health care between the countries. In a Bergen hospital a ward usually has 10 beds and 5 members of personnel on duty. Each patient has his or her own room and access to various types of activities. The treatment system is based on the principle "one nurse per one patient" and the nurse on duty is responsible for one or maximum two patients. Treatment is based on the cooperation of nurses and patients as a team in order to reach the goal, that is the patient's recovery.

In the examined Polish hospitals, wards can accommodate between 27 and 70 patients with frequently 2-5 nurses on duty, depending on the character of the ward. Patients stay in shared rooms and have an opportunity to participate in art therapy and group or individual psychotherapy. Nurses cooperate within their professional team but they are assigned individual tasks. The objective of the study was to find out whether there are any differences in the attitudes and perception of patients' aggression between the groups of personnel from Poland and Norway. This issue had not previously been discussed in the subject literature. However, it should be assumed that such differences exist, so the question pertains to their direction and intensity.

MATERIAL AND METHOD

Two tools were used to identify the attitudes of the medical personnel towards aggression: POAS (Perception of Aggression Scale) and ATAS (Attitudes Towards Aggression Scale). The former scale has a Polish adaptation, while the latter is currently undergoing statistical anal-

yses. ATAS has already been used in comparative studies of many countries [17].

The POAS questionnaire was created in order to understand better how the perceiving of aggression by nurses affects patient care and to estimate the consequences of aggression for their professional work. On the basis of the factor analysis it was possible to distinguish three subscales – aggression understood as normal behaviour, reactions connected with violence, and functional behaviour [22]. Further study of the German language version confirmed the existence of two factors [7]. Similar results were obtained in a survey of Turkish nursing students [23]. In a survey of a group of Swedish nurses, POAS was shortened to 12 questions [24]. The Polish adaptation of the tool, similarly to the Chinese one, demonstrated the existence of three factors [25, 26]. Cronbach alpha coefficient for subsequent scales in the Polish version was calculated as 0.80, 0.75 and 0.82 respectively. This version of the scale was used in the research.

The other tool was the Attitude Towards Aggression Scale (ATAS). This tool serves to evaluate the perception of aggression by medical staff. The theoretical basis for the creation of this method was the above-mentioned Theory of Planned Behaviour by Ajzen [12]. The purpose for creating this tool was to find out which attitudes of nurses accompany patients' aggression and to identify which personal and social factors affect these attitudes. It was assumed that these factors would have an impact on attitudes. A practical effect of the research was supposed to be the construction of a tool for estimating attitudes towards aggression which could serve to monitor aggression management [15]. The tool was created mostly on the basis of aggression definitions given by the respondents, and to a lesser extent – on the basis of the subject literature. The research which gave rise to ATAS was an analysis of aggression perception by nurses in five countries, including Norway. The analysis used POAS questionnaire with 32 questions [15]. The factor analysis resulted in the creation of ATAS with 18 questions divided into five factors. In accordance with these factors, aggression was perceived as the following behaviour:

1. Offensive, in the sense of insulting, hurtful, unpleasant and unacceptable behaviour including verbal aggression.
2. Communicative, in the sense of a signal resulting from the patient's powerlessness aimed at enhancing the therapeutic relationship.
3. Destructive, a component indicating the threat of or an actual act of physical harm or violence.
4. Protective, indicating the shielding or defending of physical and emotional space.
5. Intrusive, expressing the intention to damage or injure others.

The Cronbach alpha coefficient for subsequent ATAS scales was calculated as 0.82, 0.65, 0.67, 0.60 and 0.67 respectively. The authors divide the factors into two groups: communication and protection perceived as associated with positive energy and behaviour, and offence, destruction and intrusion as manifestations of the negative perspective on aggressive behaviour. The authors also point to the negative correlation they have observed between these factors.

The research comprised 300 people but, as a result of mistakes in filling in the questionnaires, only 280 people were qualified for the final analyses – the personnel of psychiatric wards from the psychiatric hospital in Bergen in Norway (140 participants) and from the psychiatric hospitals in Żurawica and Jarosław in Poland (140 people). Table 1 contains information about the sex, age and work experience of the surveyed respondents. Differences in the years of service and age of the respondents result from the dissimilar systems of personnel education – in Poland a nurse in a psychiatric ward is usually a person who has completed a 3-year specialization course and has experience of work in other hospital wards, whereas in Norway a psychiatric ward is frequently the first place of work for the personnel. However, to avoid the influence of the age and experience factor,, the groups were matched in terms of professional experience and age

As the variables under consideration did not have normal distribution, the Shapiro–Wilk test of normality was used. The intervention effectiveness was measured by the Wilcoxon signed-rank test. The significance of the differences between the participants' genders and faculties was evaluated by means of the U-Mann Whitney test. A comparison made between male and female

groups indicated no statistically relevant differences in relation to the variables tested. In all calculations, IBM SPSS Statistics 25 was used, and the statistical significance was at $p \leq 0.05$.

Table 1. Demographic data of the surveyed group (n= 280)

Group	Sex	Age (mean/standard deviation)		Years of service (mean/standard deviation)	
Norway (N)	86 women 54 men	33.05 (+/ – 12.19)	0.10	6.21 (+/ – 9.83)	0.07
Poland (P)	134 women 6 men	31.86 (+/ 10.30)		8.53 (+/ – 8.74)	

The study had an anonymous character, the respondents were able to refuse participation or resign at any stage. The whole process, including explanation of the purpose of the study, took ca 15 minutes on average. The Bioethical Commission of the Jagiellonian University Medical College gave their consent, as part of a project of adapting tools for research on personnel attitudes towards aggression.

RESULTS

Due to the fact that there is no Norwegian normalization of ATAS and POAS, the results obtained were analysed on the basis of differences between particular questions in the questionnaires and the outcomes of particular subscales achieved in the analyses by the authors of the original tools. In order to broaden the analysis, the subscales of both questionnaires were also compared. The results obtained in POAS are presented in Table 2.

Table 2. Results of the Mann-Whitney U test of statistical significance for particular POAS questions

Question of the scale	Group	X	SD	Me	Significance
1. Aggression is an unpleasant and repulsive behaviour	N	3.44	0.87	4.00	0.59
	P	3.34	1.59	4.00	
2. Aggression is unnecessary and unacceptable	N	2.82	0.89	3.00	<0.01
	P	3.36	1.44	4.00	
3. Aggression is hurting others mentally or physically	N	3.28	0.90	4.00	0.13
	P	3.36	1.60	4.00	
4. Aggression is an actual action of physical violence of a patient against a nurse	N	2.53	1.01	2.00	<0.01
	P	3.41	1.29	4.00	
5. Aggression is always negative and unacceptable; feelings should be expressed in another way	N	2.69	1.09	2.00	<0.01
	P	3.43	1.34	4.00	
6. Aggression is a disturbing intrusion to dominate others	N	2.93	0.85	3.00	0.01
	P	3.29	1.34	4.00	
7. Aggression is the start of a positive nurse–patient relationship	N	2.37	0.84	2.00	0.54
	P	2.69	1.62	2.00	
8. Aggression is a healthy reaction to feelings of anger	N	2.70	0.96	3.00	0.95
	P	2.77	1.50	2.50	
9. Aggression is an opportunity to get a better understanding of the patient's situation	N	3.41	0.92	4.00	<0.01
	P	2.63	1.40	2.00	
10. Aggression is a form of communication and as such not destructive	N	2.95	0.96	3.00	0.01
	P	2.59	1.47	2.00	

11. Aggression is a way to protect yourself	N	3.83	0.69	4.00	<0.01
	P	2.57	1.24	2.00	
12. Aggression is the protection of one's own territory	N	3.66	0.69	4.00	<0.01
	P	2.50	1.17	2.00	

X – mean, SD – standard deviation, Me – median N – Norway P – Poland

The results obtained demonstrate statistically significant differences with respect to all the statements concerning the perception of aggression.

The Norwegian personnel less frequently than the Polish personnel agree with the statements which describe aggression as unpleasant, unacceptable and negative behaviour. On the other hand, the Norwegian staff more frequently view aggression as behaviour which is, a form of communication and the protection of oneself.

Table 3. Results of the Mann-Whitney U test of statistical significance for POAS and ATAS subscales

POAS subscale	Group	X	SD	Me	Significance
Negative perception of aggression	N	17.55	4.16	18.00	<0.01
	P	22.37	6.80	24.00	
Positive perception of aggression	N	18.78	3.49	19.00	<0.01
	P	15.76	6.58	15.00	
Aggression as offensive	N	20.91	4.97	21.00	0.06
	P	22.54	8.48	24.00	
Aggression as destructive	N	9.46	2.62	10.00	0.15
	P	9.99	3.84	11.00	
Aggression as intrusive	N	8.59	2.22	8.00	0.01
	P	9.46	2.78	10.00	
Aggression as communication	N	8.73	1.93	9.00	0.54
	P	8.46	3.14	8.00	
Aggression as protective	N	7.21	1.50	8.00	<0.01
	P	5.28	1.98	5.00	

X – mean. SD – standard deviation. Me – median N – Norway P – Poland

The results obtained demonstrate statistically significant differences within subscales of both questionnaires. The Norwegian personnel more frequently view aggression as positive behaviour, connected with the protection of one's own territory. On the other hand, the Polish personnel more often perceive aggression as negative, offensive and intrusive behaviour.

Table 4. Results of the Mann-Whitney U test of statistical significance for particular ATAS questions

ATAS question Aggression is...	Group	X	SD	Me	Significance
1. is an example of a non-cooperative attitude	N	2.88	0.99	3.00	0.24
	P	3.05	1.29	3.00	
2. is the start of a more positive nurse patient relationship	N	2.12	0.89	2.00	<0.01
	P	2.86	1.61	2.00	
3. is unpleasant and repulsive behaviour	N	3.63	0.77	4.00	0.12
	P	3.16	1.57	4.00	

4. is an impulse to disturb and interfere in order to dominate or harm others	N	3.08	1.04	3.00	0.37
	P	3.17	1.49	4.00	
5. cannot be tolerated	N	2.86	1.06	3.00	0.01
	P	3.31	1.52	4.00	
6. offers new possibilities in nursing care	N	3.19	0.91	3.00	0.01
	P	2.75	1.32	3.00	
7. is a powerful. mistaken. non-adaptive. verbal and/or physical action done out of self-interest	N	2.93	1.06	3.00	0.04
	P	3.21	1.10	3.00	
8. is unnecessary and unacceptable behaviour	N	2.81	1.09	3.00	0.01
	P	3.23	1.39	4.00	
9. is when a patient has feelings that will result in physical harm to self or to others	N	3.02	1.13	3.00	0.03
	P	3.34	1.21	4.00	
10. is to protect oneself	N	3.65	0.91	4.00	<0.01
	P	2.70	1.14	3.00	
11. in any form is always negative and unacceptable	N	2.35	0.95	2.00	<0.01
	P	3.41	1.20	4.00	
12. is violent behaviour to others or self	N	3.09	1.07	3.00	0.06
	P	3.33	1.43	4.00	
13. is threatening to damage others or objects	N	3.42	0.97	4.00	0.55
	P	3.35	1.52	4.00	
14. is destructive behaviour and therefore unwanted	N	3.25	1.02	3.00	0.46
	P	3.31	1.43	4.00	
15. is expressed deliberately. with the exception of aggressive behaviour of someone who is psychotic	N	2.64	0.90	3.00	<0.01
	P	3.14	1.21	3.00	
16. poisons the atmosphere on the ward and obstructs treatment	N	3.27	0.96	4.00	0.82
	P	3.21	1.46	4.00	
17. helps the nurse to see the patient from another point of view	N	3.47	0.76	4.00	<0.01
	P	2.84	1.07	3.00	
18. is the protection of one's own territory and privacy	N	3.61	0.79	4.00	<0.01
	P	2.61	1.09	2.00	

X – mean. SD – standard deviation. Me – median N – Norway P – Poland

Statistically significant differences are demonstrated within all the subscales. The Polish personnel more frequently perceive patients' aggression as non-cooperative and unpleasant behaviour, connected with the intent to harm others. Moreover, the Polish personnel think, more frequently than the Norwegian staff, that aggression cannot be tolerated because it is indispensably connected with violence and is an intention to inflict physical harm. Both groups agree that it poisons the atmosphere on the ward and obstructs the treatment process.

The Norwegian personnel more often regard aggression as behaviour offering new opportunities in relationships with a patient, showing him or her in a new perspective and being the protection of one's self and one's own territory.

DISCUSSION

The objective of the study was to identify differences in the way of perception and attitudes

towards aggression in the groups of personnel working on psychiatric wards in Poland and Norway.

In referring to the TPB concept in the personnel-patient relation, aggression is determined by three groups of factors: those connected with the patient, with the personnel and with their environment. They directly influence a patient's aggression, which in turn determines the way of coping with it. The result is an aggressive incident [10].

The results obtained reveal significant differences in the studied features. The Polish personnel seem to perceive aggression in a much more negative way and less frequently perceive in it any elements which could contribute to better relationships with the staff. On the other hand, Norwegian health care workers more often regard aggression as behaviour resulting from a lack of communication or from the protection of one's own territory. On the basis of the subject literature it was assumed that such differences exist but their intensity can be surprising. Some of the factors did not show statistically significant differences between the examined groups. Both groups perceived aggression as a negative behaviour that hindered the functioning of the ward. That indicates the aspect of the "practical" perception of aggression as a behaviour which negatively influence the functioning of the ward and affect the therapeutic process

Even though the above-mentioned factors do not exhaust the scale of the phenomenon, they do point to its complexity and show how influential the personal attitude of a medical personnel towards aggression is. Attitudes have a motivational and cognitive significance. They facilitate orientation within an environment and make it possible to manage perception and judgement, to plan and take decisions more effectively. Moreover, they provide certain standards and a framework for organization and the simplification of frequently complex information from the given environment and enable one to formulate a sensible, stable and orderly vision of the world, as well as providing for a better organization of perception and beliefs, ensuring a clarity and cohesion of the information obtained [27].

The reasons for such a state of affairs could be seen in many factors connected both with the education and health care systems in the discussed states. The education of nurses in Norway is strongly focused on aspects of communication with patients and their families. Considerable emphasis is placed on relationships and cooperation in the treatment process. An important aspect of the study curriculum is also interculturalism and the risks connected with the mental functioning of elderly people, especially difficulties in communication. Furthermore, the personnel complete training courses on effective cooperation and communication within an organization and on conflict solving.

Even though the communication aspect is important also in the education of Polish nurses on psychology courses, the education system puts more emphasis on theoretical knowledge than on practical skills in this field.

Another aspect which cannot be disregarded is the problem of working conditions and the level of economic development of the discussed countries. Without doubt, this is an important factor but it does not affect the development of teaching methods for future nurses and their way of understanding patients.

Furthermore, the character of the personnel's work is also important. As has already been mentioned, psychiatric wards in Norway usually have 10 beds, and there are seven members of personnel per one patient. In Poland these proportions look completely different, because wards have between 23 and 70 beds, depending on their character. Therefore, the Polish personnel have few chances to develop close relationships with individual patients. The excessively burdened personnel have fewer opportunities for reflection and pondering over the causes and motivation behind a patient's behaviour. In consequence, the perception of aggression is more distinctly negative in comparison to the Norwegian personnel, who seem to notice a wider range of motives behind a patient's behaviour, as well as more possibilities to utilise them in their work. In accordance with the TPB concept, attitudes shaped in this way shall affect future actions undertaken in response to patients' aggression.

The character of the personnel's work differs considerably between the two discussed countries. Therefore, it should be assumed that, owing to such different work experiences, the at-

titudes of the personnel working with patients should equally vary.

The research results and previous research have enabled us to draw the conclusion that attitudes towards patients' aggression depend on numerous factors, including the country and culture in which a given nurse works. These factors affect in turn a nurse's conduct towards a patient and the methods used to deal with aggressive behaviour.

Certainly, the study has some limitations. One of them was sample size. Further research should encompass a larger group of surveyed personnel in order to take into account possible differences between particular health care institutions within the same country. There is a need to analyze the influence of work experience to the perception of aggression, which was not taken into account. The issue of the perception of aggression needs a more detailed analysis taking into account more factors which could contribute to such significant differences. The impact of so-called occupational burnout, which considerably influences the attitudes towards aggression, requires an in-depth study.

Moreover, the study has practical implications. A knowledge of attitudes towards aggression and their influence on personnel conduct shall enable the managerial staff to undertake proper remedial actions focused, for example, on training courses on how to cope with a difficult patient.

CONCLUSIONS

Personnel attitudes constitute an important element of care which has a direct impact on health care quality and, as such, cannot be ignored. The study shows that there is a need for far-reaching changes in the education curriculum of health care personnel. Attitudes towards patients' aggression are shaped already at the level of academic education. A lack of awareness that difficult behaviour has many aspects causes a more or less negative approach to it in the future. Therefore, it is necessary to construct education programmes in such a way whereby they focus on practical aspects, in this way enabling future health care workers to better understand patients' behaviour. Thus, it would enable the selection of effective ways of conduct and would positively influence the quality of health care.

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